



# **ZERO WASTE AT SIERRA NEVADA**

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1980



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# SNAPSHOT

- 3<sup>rd</sup> largest craft brewery
- 10<sup>th</sup> largest brewery overall
- Independent/family-owned
- ~1000 employees
- Pioneer/mentor in craft
- Leader in sustainability



**SUFFERFEST®**  
*Beer Company*

NATURAL & ORGANIC  
**STRANGE  
BEAST™**  
HARD KOMBUCHA



SIERRA NEVADA BREWING CO.

# TRIPLE BOTTOM LINE

## **Social Equity**

- Employee wellness, safety, equity & inclusion
- Community & philanthropy
- Advocacy

## **Environmental Resiliency**

- GHG Reduction/align with Paris Agreement
- Closed Loop Philosophy
- **Zero Waste**

## **Economic Stability**

- Operating costs are met with the ability to reinvest, give back, & plan for the future



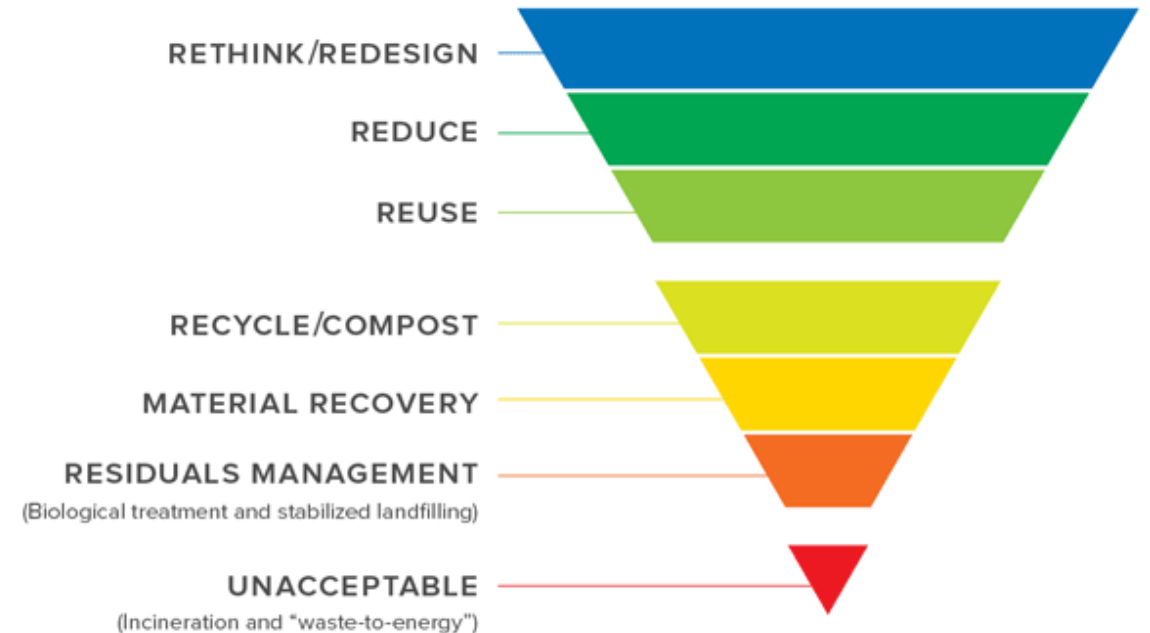
Driven by values, continuous improvement, and a commitment to do the right thing.



# ZERO WASTE OPERATIONS

- ZWIA Definition of Zero Waste
- First TRUE Platinum Facility (2013)
- Key Performance Indicator (KPI)
  - Diversion Rate: 99.6%
  - Generation: 5 lbs / bbl (excl spent grain)

## THE ZERO WASTE HIERARCHY 7.0



© Zero Waste International Alliance [zwia.org/zwih](http://zwia.org/zwih)

# EMPLOYEE ENGAGEMENT

- New employee orientation & onboarding
- Zero Waste 101
- Excess & Obsolete Process
- Purchasing Criteria / Guidelines







# REDUCE / REUSE









RECYCLE  
&  
COMPOST





# **CLOSING THE LOOP**

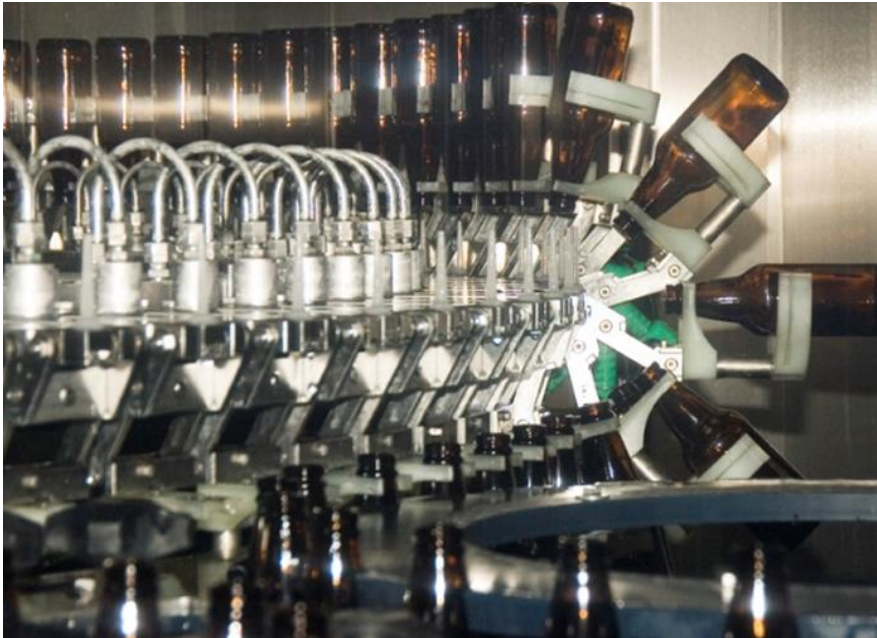




# ONSITE COMPOSTING

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# WATER REUSE

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# WASTEWATER TO ENERGY



Brewing Operations



Wastewater Treatment



Biogas Recovery



Boilers/Microturbines

# CO<sub>2</sub> RECOVERY





# BIODIESEL





# ADVOCACY

- Bottle Bills / Deposit Legislation
- Post-consumer recycled content
- Reduction of non-recyclable, single-use packaging
- Consumer engagement





www.SierraNevada.com



## Sustainability

Use our interactive maps to explore how we slash our environmental impact at both breweries, from a next-level “reduce, reuse, recycle” mindset to generating alternative energy onsite.

[Explore the Maps](#)

TOTAL POWER GENERATION		
ENERGY SOURCE	KILOWATTS	% OF BREWERY POWER
Capstone Microturbines	1072kW	71%
Solar Arrays	427kW	28%
Total	1499kW	100%





**THANK YOU!**